

Mr. James Herbert
U.S. Granules Corp.
P.O. Box 130
Plymouth, IN 46563

Re: 099-12184-00015
First Administrative Amendment to
FESOP 099-5463-00015

Dear Mr. Herbert

U.S. Granules Corp. was issued a permit on December 11, 1996 for processing secondary non-ferrous metals. A letter requesting a modification to the permit was received on April 19, 2000. Pursuant to the provisions of 326 IAC 2-8-10 (a) 14, the permit is hereby administratively amended to add as a insignificant activity as follows:

One (1) natural gas fueled, 7.5KW emergency generator, exhausting directly to the atmosphere.

All other conditions of the permit shall remain unchanged and in effect. Please attach a copy of this amendment and the following revised permit pages to the original permit.

This decision is subject to the Indiana Administrative Orders and Procedures Act - IC 4-21.5-3-5. If you have any questions on this matter, please contact R. Joe Crawford, at (800) 451-6027, press 0 and ask for R. Joe Crawford or extension 3-0431, or dial (317) 233-0431.

Sincerely,

Paul Dubenetzky, Chief
Permits Branch
Office of Air Management

Attachments

RJC

cc: File - Marshall County
U.S. EPA, Region V
Marshall County Health Department
Air Compliance Section Inspector- Rick Reynolds
Compliance Data Section - Karen Nowak
Administrative and Development - Janet Mobley
Technical Support and Modeling - Michele Boner

**FEDERALLY ENFORCEABLE STATE
OPERATING PERMIT (FESOP)
OFFICE OF AIR MANAGEMENT**

**U.S. Granules Corporation
1433 Western Avenue
Plymouth, Indiana 46563**

(herein known as the Permittee) is hereby authorized to operate subject to the conditions contained herein, the source described in Section A (Source Summary) of this permit.

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 and contains the conditions and provisions specified in 326 IAC 2-8 and 40 CFR Part 70.6 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments) and IC 13-15 and IC 13-17 (prior to July 1, 1996, IC 13-1-1-4 and IC 13-7-10).

Operation Permit No.: F099-5463-00015	
Original issued by Paul Dubenetzky, Branch Chief Office of Air Management	Issuance Date: December 11, 1996
First Significant Permit Modification: SMF099-8121, issuance date April 20, 1998, pages affected 21-28 Second Significant Permit Modification: SMF099-9307, issuance date November 24, 1998, pages affected 3,4,5,28a	
First Administrative Amendment: 099-12184-00015	Pages Affected: 3, 4, 5,28a
Issued by: Paul Dubenetzky, Branch Chief Office of Air Management	Issuance Date:

TABLE OF CONTENTS		
Section	Description	Page No.
C	SOURCE OPERATION CONDITIONS	16
D.1	FACILITY OPERATION CONDITIONS	21
	<p>One (1) monoshear to IDEX rotary pyrolysis kiln, known as Process A, equipped with a natural gas-fired afterburner and a baghouse with a flow rate of 27,330 actual cubic feet per minute, capacity: 4.0 tons per hour.</p> <p>One (1) borings and turnings rotary kiln and H Line hammermill, known as Process G, equipped with a natural gas-fired afterburner and a baghouse with a flow rate of 4,000 actual cubic feet per minute, capacity: 0.5 tons per hour.</p>	
D.2	FACILITY OPERATION CONDITIONS	24
	<p>A/C Line hammermills, known as Process B, controlled by a baghouse with a flow rate of 4,300 actual cubic feet per minute, capacity: 1.7 tons per hour.</p> <p>D Line hammermill, known as Process C, controlled by a baghouse with a flow rate of 4,000 actual cubic feet per minute, capacity: 0.85 tons per hour.</p> <p>One (1) shredder/baler, known as Process D, controlled by a baghouse with a flow rate of 7,000 actual cubic feet per minute, capacity: 3.75 tons per hour.</p> <p>One (1) aluminum blending mixer and bagger, known as Process E, controlled by a baghouse with a flow rate of 4,000 actual cubic feet per minute, capacity: 3.0 tons per hour.</p> <p>One (1) aluminum blending and briquetting mixer, known as Process F, controlled by two (2) baghouses with flow rates of 4,600 actual cubic feet per minute and 1,880 actual cubic feet per minute, capacity: 5.0 tons per hour.</p>	
D.3	FACILITY OPERATION CONDITIONS	27
	Sixteen (16) charring ovens, known as Process H, controlled by one (1) venturi scrubber with a flow rate of 11,000 actual cubic feet per minute and two (2) wet packed towers with flow rates of 18,000 actual cubic feet per minute and 14,000 actual cubic feet per minute, capacity: 3.4 tons per hour for 2,675 hours. This item is the Alternate Operation Scenario, 1997 only.	
D.4	FACILITY OPERATION CONDITIONS	28a
	<p>(a) One (1) gasoline-fired emergency generator, known as EG-1, with a rated output of 35 brake horse power (BHP), and exhausting to the ambient air.</p> <p>(b) One (1) natural gas fueled, 7.5KW emergency generator, exhausting directly to the atmosphere</p>	
	FORMS	
	Certification Form	29
	Deviation Reporting Forms (2)	30, 31
	Total Number of Permit Pages	31
	Total Number of Forms	3
	Technical Support Document	15
	Emissions Calculations	

SECTION A

SOURCE SUMMARY

A.1 General Information

The Permittee owns and operates a secondary aluminum processing source.

Responsible Official: James Herbert.
Source Address: 1433 Western Avenue, Plymouth, Indiana 46563
Mailing Address: P.O. Box 130, Plymouth, Indiana 46563
SIC Code: 3341
County Location: Marshall
County Status: Attainment for all criteria pollutants
Source Status: Synthetic Minor Source, FESOP Program

A.2 Emission Units and Pollution Control Summary

The stationary source consists of the following emission units and pollution control devices:

- a) One (1) monoshear to IDEX rotary pyrolysis kiln, known as Process A, equipped with a natural gas-fired afterburner and a baghouse with a flow rate of 27,330 actual cubic feet per minute, capacity: 4.0 tons per hour. Fugitive particulate matter emissions escaping the end of the kiln will be captured and controlled by a baghouse system.
- b) A/C Line hammermills, known as Process B, controlled by a baghouse with a flow rate of 4,300 actual cubic feet per minute, capacity: 1.7 tons per hour.
- c) D Line hammermill, known as Process C, controlled by a baghouse with a flow rate of 4,000 actual cubic feet per minute, capacity: 0.85 tons per hour.
- d) One (1) shredder/baler, known as Process D, controlled by a baghouse with a flow rate of 7,000 actual cubic feet per minute, capacity: 3.75 tons per hour.
- e) One (1) aluminum blending mixer and bagger, known as Process E, controlled by a baghouse with a flow rate of 4,000 actual cubic feet per minute, capacity: 3.0 tons per hour.
- f) One (1) aluminum blending and briquetting mixer, known as Process F, controlled by two (2) baghouses with flow rates of 4,600 actual cubic feet per minute and 1,880 actual cubic feet per minute, capacity: 5.0 tons per hour.
- g) One (1) borings and turnings rotary kiln and H Line hammermill, known as Process G, equipped with a natural gas-fired afterburner and a baghouse with a flow rate of 4,000 actual cubic feet per minute, capacity: 0.5 tons per hour. Fugitive particulate matter emissions escaping the end of the kiln will be captured and controlled by a baghouse system.
- h) Sixteen (16) charring ovens, known as Process H, controlled by one (1) venturi scrubber with a flow rate of 11,000 actual cubic feet per minute and two (2) wet packed towers with flow rates of 18,000 actual cubic feet per minute and 14,000 actual cubic feet per minute, capacity: 3.4 tons per hour for 2,675 hours. This item is the Alternate Operation Scenario.

Permit Reviewer: MES

A.3 Insignificant Activities

This stationary source also includes the following insignificant activities, as defined in 326 IAC 2-7-1(21):

- a) Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) British thermal units per hour.
- b) A gasoline fuel transfer and dispensing operation handling less than or equal to 1,300 gallons per day, such as filling of tanks, locomotives, automobiles, having a storage capacity less than or equal to 10,500 gallons.
- c) Storage tanks with capacity less than or equal to 1,000 gallons and annual throughputs less than 12,000 gallons.
- d) Vessels storing lubricating oil, hydraulic oils, machining oils, and machining fluids.
- e) Degreasing operations that do not exceed 145 gallons per 12 months, except if subject to 326 IAC 20-6.
- f) Cleaners and solvents characterized as follows: a) having a vapor pressure equal to or less than 2 kilopascals; 15 millimeters of mercury; or 0.3 pounds per square inch measured at 38EC (100EF) or; b) having a vapor pressure equal to or less than 0.7 kilopascals; 5 millimeters of mercury; or 0.1 pounds per square inch measured at 20EC (68EF); the use of which for all cleaners and solvents combined does not exceed 145 gallons per 12 months.
- g) Replacement or repair of electrostatic precipitators, bags in baghouses and filters in other air filtration equipment.
- h) A laboratory as defined in 326 IAC 2-7-1(20)(C).
- i) An emergency gasoline generator not exceeding 110 horsepower.
- j) One (1) natural gas fueled, 7.5KW emergency generator, exhausting directly to the atmosphere

A.4 FESOP Applicability [326 IAC 2-8-2]

This stationary source, otherwise required to have a Part 70 permit as described in 326 IAC 2-7-2(a), has applied to Indiana Department of Environmental Management (IDEM), Office of Air Management (OAM) for a Federally Enforceable State Operating Permit (FESOP).

SECTION D.4 FACILITY OPERATION CONDITIONS

The following insignificant activity:

- (a) One (1) gasoline-fired emergency generator, known as EG-1, with a rated output of 35 brake horse power (BHP), and exhausting to the ambient air.
- (b) One (1) natural gas fueled, 7.5KW emergency generator, exhausting directly to the atmosphere.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions).

Emissions Limitations and Standards [326 IAC 2-8-4(1)]

D.4.1 Usage Limit [326 IAC 2-1]

- (a) Pursuant to 326 IAC 2-1, the emergency generator (EG-1) shall use no more than 1300 gallons of gasoline per twelve (12) consecutive month period. This usage limit is required to limit the potential hours of operation to 500 hours per year. Compliance with this limit satisfies the permitting requirements of 326 IAC 2-1 (Construction and Operating Permit Requirements).
- (b) The 7.5KW emergency generator shall be limited to 61.5mmBTU/yr of natural gas which correlates to 500 hours of operation per year.

Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)]

D.4.2 Record Keeping Requirements

To document compliance with Condition D.4.1, the Permittee shall maintain records of fuel usage:

- (a) Emergency generator EG-1-gasoline usage
- (b) 7.5 KW Emergency generator-natural gas usage

Records shall be taken monthly and shall be complete and sufficient to establish compliance with the gasoline usage limit established in Condition D.4.1.

Indiana Department of Environmental Management Office of Air Management

Technical Support Document for First Administrative Admendment of the Federally Enforceable State Operating Permit (FESOP)

Source Background and Description

Source Name:	U.S. Granules Corporation	
Source Location:	1433 Western Avenue, Plymouth, Indiana 46563	
County:	Marshall	
Permit No.:	F099-5463-00015	Issued: December 11, 1996
Revision No.	099-12184-00015	
SIC Code:	3341	
Permit Reviewer:	R. Joe Crawford	

History

On April 19, 2000, U.S. Granules Corporation submitted a request to add a second emergency generator (rated at 7.5KVA) to their existing FESOP.

New Source Review

Emissions Calculations

The applicant's emission calculations were reviewed and found to be accurate. These were used for the permitting decisions.

Potential to Emit

Pollutant	Potential To Emit	
	(lb/hr)	(ton/yr)
PM/PM-10	0.00	0.0
SO ₂	negligible	negligible
VOC	0.01	0.0
CO	0.30	0.1
NO _x	0.07	0.0
Single HAP	negligible	negligible
Combination of HAPs	negligible	negligible

- (a) The PTE from the generator is based on operating the unit 500 hours per year. This is consistent with guidance from the U.S. EPA, dated February 20, 1997, which states that if a generator is only used for emergency purposes and a permit would only be required due to the generator, then potential emissions can be calculated using a default "worst case" operating time of 500 hours per year.
- (b) The source is adding an emission unit of the same type that is already permitted with the same applicable requirements. Therefore, pursuant to 326 IAC 2-8-10 (a) (14), an administration permit amendment is required.

County Attainment Status

Volatile organic compounds (VOC) and oxides of nitrogen (NO_x) are precursors for the formation of ozone. Therefore, VOC and NO_x emissions are considered when evaluating the rule applicability relating to the ozone standards. Marshall County has been designated as attainment or unclassifiable for ozone. Therefore, VOC and NO_x emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.

Marshall County has been classified as attainment or unclassifiable for all other regulated pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.

Enforcement Issue

There are no enforcement issues pending for this source

Recommendation

The staff recommends to the Commissioner that the construction and operation be approved. This recommendation is based on the following facts and conditions:

Information, unless otherwise stated, used in this review was derived from the application and additional information submitted by the applicant.

A complete application for the purposes of this review was received on December 16, 1997.

Federal Rule Applicability

- (a) There are no New Source Performance Standards (326 IAC 12) and 40 CFR Part 60 applicable to this facility.
- (b) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs)(326 IAC 14 and 40 CFR art 63) applicable to this source.

State Rule Applicability

326 IAC 2-8-10 (14)

This rule incorporates a modification that adds an emission unit or units of the same type that are already permitted and that will comply with the same applicable requirements and permit terms and conditions as the existing unit or units, except if the modification would result in a potential to emit greater than the thresholds in 326 IAC 2-2 or 326 IAC 2-3.

Changes to FESOP

The Office of Air Management (OAM) has reviewed an application from U.S. Granules Corporation relating to the requested revisions of their FESOP and is making the following changes:

1. Description of Emissions Units and Insignificant Activities will be updated to include an additional emergency generator.(Condition A-3 Insignificant Activities)

(b) One (1) natural gas fueled, 7.5KW emergency generator, exhausting directly to the atmosphere

2. Section D.4 will be updated for the emergency generator with the following conditions included:
The following insignificant activity:

(a) Description Box

(b) One (1) natural gas fueled, 7.5KW emergency generator, exhausting directly to the atmosphere.

(b) Condition D.4.1 -Usage Limit (Condition (b) is added)

The 7.5KW emergency generator shall be limited to 61.5mmBTU/yr of natural gas which correlates to 500 hours operation per year.

(c) Condition D.4.2 - is revised as follows:

To document compliance with Condition D.4.1, the Permittee shall maintain records of natural gas fuel usage. Records shall be taken monthly and shall be complete and sufficient to establish compliance with the natural gas usage limit established in Condition D.4.1.

Recommendation

The staff recommends to the Commissioner that the modification be approved.

Information, unless otherwise stated, used in this review was derived from the application and additional information submitted by the applicant.

Conclusion

The modifications of this source will be subject to the conditions of the attached proposed FESOP First Administrative Amendment 099-12184-00015.